Lemke, D.E. 2014. Validation of the name *Lechea torreyi* var. *congesta* (Cistaceae). Phytoneuron 2014-33: 1–2. Published 4 March 2014. ISSN 2153 733X

VALIDATION OF THE NAME *LECHEA TORREYI* VAR. *CONGESTA* (CISTACEAE)

DAVID E. LEMKE
Department of Biology
Texas State University
601 University Drive
San Marcos, Texas 78666-4684
email: david.lemke@txstate.edu

ABSTRACT

Although widely used for plants of the southeastern United States, the name *Lechea torreyi* var. *congesta* was never validly published. The oversight is corrected here, and the differences between *L. torreyi* var. *congesta* and the nominate variety are discussed.

The genus *Lechea* Kalm. ex L. comprises 18 species of perennial herbs and subshrubs widely distributed across eastern North America southwestward to Texas, New Mexico, and Mexico, with representatives in the West Indies (Cuba) and Belize. While members of the genus are distinct and easily recognized, accurate species determinations often prove difficult. Species are often delimited on the basis of minute or technical characters such as capsule width and seed length or the relative lengths of the inner and outer sepals. Plants collected early in the growing season, before fruits are fully mature, may prove impossible to identify with certainty. When available, regional taxonomic treatments, such as those of Barringer (2004) and Spaulding (2013) can prove to be invaluable resources for making determinations.

At present, the only comprehensive taxonomic treatment of the genus is that of Hodgdon (1938). In this treatment, Hodgdon recognized one new species (*Lechea mensalis*) and eleven new varieties:

L. villosa Ell. var. *macrotheca* and var. *schaffneri* (both now included in *L. mucronata* Raf.);
L. tenuifolia Michx. var. *occidentalis*;
L. intermedia Leggett ex Britt. var. *depauperata*, var. *juniperina*, and var. *laurentiana*;
L. maritima Leggett var. *subcylindrica* and var. *virginica*;
L. leggettii Britt. & Hollick var. *moniliformis* and var. *ramosissima* (both now treated as varieties of *L. pulchella* Raf.); and
L. torreyi Leggett ex Britt. var. *congesta.*

The latter name, however, was not accompanied by a Latin diagnosis and is therefore invalid; this oversight is corrected here.

Lechea torreyi Leggett ex Britton var. **congesta** Hodgdon ex Lemke, **var. nov. TYPE. UNITED STATES. Florida.** Duval Co.: Dry pine-barrens, ne Florida, Aug, *A.H. Curtiss 232** (holotype: NY; isotype: NY).

Similar to *Lechea torreyi* Leggett var. *torreyi* in the brownish-green coloration of the plant, the densely-appressed pilosity of the stems, the small size of the capsules (<2 mm diam.) and the coastal plain distribution, but differing in its compact, ascending branches, markedly rust-colored inner sepals, crowded or clustered fruits, and the presence of three seeds per capsule.

Plants perennial herbs; **aerial stems** 20–40 cm tall, dull brownish-green, densely appressed-pilose; **basal stems** lacking; **leaves** with petioles not well-differentiated from the blades, the blades linear to narrowly elliptic, 10–20 mm long, 1–1.5 mm wide, with adaxial surface glabrous and abaxial surface pilose; **inflorescence** a compact panicle, the branches crowded and strongly ascending to

suberect; **flowers** crowded or fascicled on short side branches, the inner sepals longer than the outer sepals, at maturity the calyx strongly rust-colored giving a reddish cast to the plant in fruit; **capsules** ovoid, 1.5–1.7 mm long; **seeds** 3, slightly dorsiventrally compressed.

Leggett (1878) was the first author to note that there are two recognizable elements within the populations now assigned to *L. torreyi*: plants with calyces dark brown to slightly rust-colored and densely pilose with cinereous pubescence, the capsules loosely arranged or scattered and containing 4 to 6 seeds — and plants with calyces markedly rust-colored and pubescence not conspicuously cinereous, the capsules densely clustered and containing 3 seeds. Hodgdon was the first to accord formal recognition to these entities, applying the name *L. torreyi* var. *congesta* to plants with densely congested inflorescences and 3-seeded capsules, although as noted above this name was not validly published. With a distribution spanning South Carolina, Georgia, Florida, Alabama, Mississippi, and a disjunct occurrence in Belize, var. *congesta* is the more common and widespread variety of the species (var. *torreyi* is restricted to Florida).

In their treatment of *Lechea* in the southeastern USA, Wilbur and Daoud (1961) chose to not recognize varieties within *L. torreyi*. Although they accepted the distinction between 3-seeded and 4- to 6-seeded plants, these authors felt that the other morphological differences were "certainly not striking or clear-cut and . . . rather subjective in nature." More recent authors, however (e.g., Weakley 2012 and Spaulding 2013), have followed Hodgdon in recognizing the two entities. While acknowledging that additional fieldwork is needed to ascertain whether true geographic or ecological separation exists between the varieties, the forthcoming treatment of *Lechea* for the Flora of North America (Lemke, in prep) will maintain Hodgdon's segregation of *L. torreyi* into two varieties.

LITERATURE CITED

Barringer, K. 2004. New Jersey pinweeds (*Lechea*, Cistaceae). J. Torrey Bot. Soc. 131: 261–276.

Hodgdon, A.R. 1938. A taxonomic study of *Lechea*. Rhodora 40: 29–69, 87–131.

Leggett, W.H. 1878. Rafinesque's *Lechea*. Bull. Torrey Club 6: 246–252.

Spaulding, D.D. 2013. Key to the pinweeds (*Lechea*, Cistaceae) of Alabama and adjacent states. Phytoneuron 2013-99: 1–15.

Weakley, A.S. 2012. Flora of the Southern and Mid-Atlantic States. Working draft of 30 Nov 2012. Univ. of North Carolina Herbarium (NCU), Chapel Hill. <http://www.herbarium.unc.edu/FloraArchives/WeakleyFlora_2012-Nov.pdf>

Wilbur, R.L. and H.S. Daoud. 1961. The genus *Lechea* (Cistaceae) in the southeastern United States. Rhodora 63: 103–118.